

AF EFW



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Andrew Sarkisian, et al.

Serial No.: 09/395,455

Group Art Unit: 3623

Filed: September 14, 1999

Examiner: Colon, Catherine M.

Title: METHOD FOR PROFILING NEW VEHICLES AND IMPROVEMENTS

Atty. Docket No.: 199-1135 (FGT 1113 PA)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Briefs – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

November 19, 2004  
(Date of Deposit)

Lisa Butler

Ysabel A. Butler  
(Signature)

**APPEAL BRIEF**

Mail Stop Appeal Briefs - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Madam:

The following Appeal Brief is submitted pursuant to the Notice of Appeal filed November 11, 2004, in the above-identified application.

**I. Real Party in Interest**

The real party in interest in this matter is The Ford Global Technologies, Inc. in Dearborn, Michigan (hereinafter "Ford"), which is the assignee of the present invention and application.

12/08/2004 CNGUYEN 00000004 061510 09395455

01 FC:1402

340.00 DA

## **II. Related Appeals and Interferences**

There are no other known appeals or interferences, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## **III. Status Of The Claims**

Claims 1-4, 6-8, 10, 13-15, 17-21, 23, 26-31, and 33 are currently pending. Claims 10 and 23 are objected to and claims 1-4, 6-8, 13-15, 17-21, 26-31, and 33 stand under final rejection, from which this appeal is taken. A copy of the claims on appeal is attached as an Appendix.

## **IV. Status Of Amendments**

The claims have been amended throughout the prosecution history in response to three Non-final Office Actions, three Final Office Actions, and two Advisory Actions (not including the Advisory Action of November 11, 2004). Subsequent to the filing of a Continued Prosecution Application (CPA) on December 5, 2002 and a First Appeal Brief on December 23, 2003, the claims have been amended in response to the Non-Final Office Action of March 31, 2004 and in the latest Final Office Action of August 23, 2004. In the Response, to the Non-Final Office Action, on May 17, 2004 the only claim that was amended was claim 5, which was cancelled. In the Response, to the latest Final Office Action, on October 20, 2004 claims 1, 13, and 28 were the only claims amended, which were amended to include the implied limitations of a "processor" and a "computer". In both of the Responses of May 17, 2004 and October 20, 2004 remarks were provided for the allowance of all currently pending claims. There have been no amendments filed subsequent to the October 20<sup>th</sup> Response.

## **V. Summary Of The Invention**

By way of summary, the present invention is directed to methods of developing a brand profile for a new product or vehicle. All of the independent claims, namely claims 1, 13, and 28, encompass several points of novelty, and since claims 2-4,

6-8, 10, 14-15, 17-21, 23, 26-27, 29-31, and 33 depend from claims 1, 13, and 28, respectively, they also contain at least the same points of novelty.

Claims 1 and 13 recite a method of developing a brand profile for a new product or vehicle. The method of claim 1 includes providing a predetermined amount of product attributes 62 each representing an identifiable feature of a generic product under consideration. See pages 6-20 of the specification. Claim 13 includes a similar limitation and further specifies the limitation for inclusion of attributes from particular groups of vehicle characteristics. See page 9 of the specification, lines 3-7. The product attributes 62, of claims 1 and 13, are grouped in response to customer-oriented market research. The attributes 62 are placed in an attribute class 64 that corresponds to brand personality importance. See page 10, lines 18-34 and page 11, lines 1-4 of the specification. Thereafter, a preferred product brand position is generated via a processor as a function of the product attributes. In generating a preferred product brand position, such as primary brand positioning 68 and nameplate brand positioning 70, a competitive set of products are identified and each of the product attributes 62 are associated with a preferred competitive level with respect to the competitive set. See page 11, lines 5-34 and page 12, lines 1-24 of the specification. Target product characteristics 32 are generated as a function of the classified product attributes 62 and the preferred product brand position via the processor. The target product characteristics 32 represent customer-driven objectives for each of the product attributes 62 to be incorporated into the new product or vehicle. See page 5, line 34, page 6, lines 1-17, and page 14, lines 1-34 of the specification.

Claim 28 recites a method of developing a brand profile for a new automotive vehicle and includes similar limitations as that of claim 13. See pages 6-20 of the specification. Claim 28 further includes the limitations of providing a cross-functional product team, providing target customer characteristics 32, and providing target vehicle brand image characteristics, such as 52, 54, and 56. See page 5, lines 32-34, page 6, lines 1-17, page 8, lines 1-16, page 18, lines 22-25, and page 19, lines 16-34 of the specification. Thereafter, a preferred vehicle brand position is generated by the cross-functional product team as a function of the vehicle attributes 62, the target customer characteristics 32, and the target vehicle brand image characteristics via a computer.

See page 11, lines 5-34, and page 12, lines 1-24 of the specification. Target vehicle objectives are generated by the cross-functional product team as a function of the vehicle attributes and the preferred vehicle brand position. The target vehicle objectives represent customer-driven and image-driven characteristics for each of the vehicle attributes 62 to be incorporated into the new vehicle. See page 5, line 34, page 6, lines 1-17, and page 14, lines 1-34 of the specification.

The term "brand" utilized throughout claims 1, 13, and 28, as defined in the latest Response of October 20, 2004, as implied throughout the prosecution history, and as suggested in various locations within the present application, refer to the "Make" of a particular product. Example vehicle brands are Lincoln, Mercury, Chevrolet, and Cadillac. The term "brand", as is well understood in the art, does not refer to a particular car-category, such as subcompact domestic, import compact, and luxury domestic. As another example, the company, make, and model of the Lincoln LS automobile are Ford, Lincoln, and LS, respectfully. The car-category of the Lincoln LS may be referred to as Luxury Domestic. Note also that a brand name may refer to both the company name and the make of a particular product. For example, "Ford" refers to both the company name and the make of the Ford Mustang.

The present application suggests the definition of the term "brand" in various locations within the specification, some of which are herein provided. On page 6, in lines 18-25, it is stated that a product under consideration is positioned with respect to its role in the brand of products. An example is provided in which a product under consideration is to be the "rugged adventure" leader of the Ford SUV lineup and that the vehicle is to support the Ford Division core SUV attributes. The brand of products referred to in the example is the Ford products. Another suggestion is provided on page 7, in lines 19-25, in which it is stated that a field 42 summarizes the pricing considerations for the product brand under consideration. The pricing considerations accounted for include the price of other Ford Division products. Again the example brand provided is Ford. Additionally, on page 11, in lines 23-34, it is stated that the brand profiler 60 includes a primary brand positioning column 68 and a nameplate brand positioning column 70. The primary brand positioning in column 68 represents, for example, "Ford", "Mercury", or "Lincoln"; whereas the nameplate brand positioning

column 70 represents a specific product within that brand, such as the "Ford Expedition" or "Ford Explorer".

The methods of claims 1, 13, and 28 places each attribute in an attribute class 64 corresponding to brand personality importance. In so doing, each attribute may be given a class identifier, such as being a "differentiator", being "important", or being a "given." Each of these classes generally identifies each attribute based on brand personality importance, providing personality differences between brands for all classified attributes.

The methods of claims 1 and 13 also identify a competitive set of products and each of the product attributes 62 are associated with a preferred competitive level with respect to the competitive set that is associated with a preferred product brand position. In other words, the methods assign competitive levels for each attribute for a given brand. The competitive levels distinguish one product from another product and the preferred product brand position for each product. See page 12, lines 19-34, and page 13, lines 1-34 of the specification.

The method of claim 28 generates the preferred vehicle brand position by the cross-functional product team and as a function of target vehicle brand image characteristics. As stated in the specification of the present application and as stated in the Response to the Office Action dated March 26, 2003, the term "target vehicle brand image characteristics" has been defined to include areas of image/personality, product/service, and price/value. The target vehicle brand image characteristics provide additional "color" to the new product by identifying attributes relating to the products image and personality. See page 8, lines 1-9 of the specification.

Applicants agree that the prior art within the field of product development has included the use of customer oriented market research in the development of a product. Applicants agree that product attributes have been used to distinguish between products. Applicants also agree that the prior art includes the evaluation of product attributes in the determination of whether a customer may purchase a particular product. In addition, Applicants agree that integrated teams have been used in the development of a product. What is not known or suggested are the several novel aspects of the present invention. All of the novel aspects of the present

invention are not taught or suggested by the prior art separately or in combination. The novel aspects are described in detail below.

What is not known or suggested is the placement of product attributes 62 in an attribute class 64 corresponding to brand personality importance. What is also not known or suggested is the assignment of competitive levels for each product attribute 62 for a given product brand position to generate a preferred product brand position. Additionally, the generation of a preferred vehicle brand position through use of a cross-functional product team and as a function of target vehicle brand image characteristics. Furthermore, the generation of target product characteristics as a function of product attributes 62 and a preferred vehicle brand position, where the target characteristics represent customer-driven objectives for each of the product attributes 62 to be incorporated into the product. Moreover, the generation of target vehicle objectives by a cross-functional product team as a function of vehicle attributes 62 and a preferred vehicle brand position, where the target objectives represent customer-driven objectives for each of the product attributes 62 to be incorporated into the product.

Claim 2 recites the system of claim 1 wherein providing a predetermined number of product attributes 62 includes providing summary attributes and clarifying a definition for each of the summary attributes. The clarifying definition provides a relationship between each of the product attributes 62 and the type of product under development.

Claim 3 recites the system of claim 1 wherein providing a predetermined number of product attributes 62 includes providing a detailed definition for each of the product attributes 62. Each of the detailed definitions provides a context for each attribute as it relates to the product under development. See page 15, lines 23-34, and page 16, lines 1-5 of the specification.

Claim 4 recites the system of claim 1 wherein placing each of the attributes 62 in an attribute class 64 includes placing each attribute 62 in one of three classes wherein the first class represents attributes which differentiate the product from competing products. The second class represents important attributes, but that do not differentiate the new product from the competing products, and the third class

represents otherwise desirable product attributes. See page 11, lines 1-34, and page 12, lines 1-5 of the specification.

Claim 6 recites the system of claim 4 and further includes the ranking of each product attribute 62. The rank being related to each of the classes such that each of the attributes in the first class has a higher rank than each of the attributes in the second class. Each of the attributes in the second class has a higher rank than each of the attributes in the third class. See page 11, lines 1-34, and page 12, lines 1-5 of the specification.

Claim 7 recites the system of claim 1 and further includes the generating of a primary brand position as a function of the product attributes 62. See page 12, lines 6-34, and page 13, lines 1-6 of the specification.

Claim 8 recites the system of claim 1 and further includes the generating a present product brand position as a function of the product attributes 62.

Claim 10 recites the system of claim 1 wherein associating each of the product attributes 62 with a preferred competitive level with respect to the competitive set includes prioritizing each product attribute 62 in one of four levels, the first level represents a desire for the product attribute to be a leader (L) with respect to the competitive set, the second level represents a desire for the product attribute to be among the leaders (A) with respect to the competitive set, the third level represents a desire for the product attribute to be competitive (C) with respect to the competitive set, and the fourth level represents a desire for the product attribute to be minimally competitive (M) with respect to the competitive set. See page 15, lines 3-19 of the specification.

Claim 14 recites the system of claim 13 wherein providing vehicle attributes 62 includes providing summary attributes and clarifying a definition for each of the summary attributes. The clarifying definition provides further detail relating each of the vehicle attributes 62 to a vehicle characteristic. See page 15, lines 23-34, and page 16, lines 1-24 of the specification.

Claim 15 recites the system of claim 13 wherein providing vehicle attributes 62 includes providing a detailed definition for each of the vehicle attributes 62. Each of the detailed definitions provides a context for each attribute as it relates to

the vehicle under development. See page 15, lines 23-34, and page 16, lines 1-24 of the specification.

Claim 17 recites the system of claim 13 wherein placing each of the vehicle attributes 62 in an attribute class includes placing each attribute in one of three classes. The first class represents attributes that differentiate the vehicle from competing vehicles. The second class represents important attributes, but that do not differentiate the vehicle from competing vehicles. The third class represents otherwise desirable vehicle attributes. See page 11, lines 1-34, and page 12, lines 1-5 of the specification.

Claim 18 recites the system of claim 13 and further includes ranking each of the vehicle attributes 62. See page 11, lines 1-34, page 12, lines 1-5, and page 21, lines 7-13 of the specification.

Claim 19 recites the system of claim 17 and further includes ranking each of the vehicle attributes 62, the rank being related to each of the classes such that each of the attributes in the first class have a higher rank than each of the attributes in the second class and each of the attributes in the second class have a higher rank than each of the attributes in the third class. See page 11, lines 1-34, page 12, lines 1-5, and page 21, lines 7-13 of the specification.

Claim 20 recites the system of claim 13 and further includes generating a primary brand position as a function of the vehicle attributes 62. See page 12, lines 6-34, and page 13, lines 1-6 of the specification.

Claim 21 recites the system of claim 13 and further includes generating a present product brand position as a function of the vehicle attributes 62.

Claim 23 recites the system of claim 13 wherein associating each of the vehicle attributes 62 with a preferred competitive level with respect to the competitive set includes prioritizing each vehicle attribute 62 in one of four levels, the first level representing a desire for the vehicle attribute to be a leader (L) with respect to the competitive set, the second level representing a desire for the vehicle attribute to be among the leaders (A) with respect to the competitive set, the third level representing a desire for the vehicle attribute to be competitive (C) with respect to the competitive set, and the fourth level representing a desire for the vehicle attribute to be minimally



competitive (M) with respect to the competitive set. See page 15, lines 3-19 of the specification.

Claim 26 recites the system of claim 19 wherein ranking each of the attributes 62 includes ranking design attributes differently than usage experience attributes and driving experience attributes. See page 9, lines 17-34 of the specification.

Claim 27 recites the system of claim 26 wherein classifying each of the attributes 62 includes classifying each design attribute on a scale having more gradients than the classification scale for classifying usage experience attributes or driving experience attributes. See page 9, lines 17-34 of the specification.

Claim 29 recites the system of claim 28 wherein providing target customer characteristics includes providing a brand positioning summary 30. See page 5, lines 17-34, and page 6, lines 1-15 of the specification.

Claim 30 recites the system of claim 29 wherein the brand positioning summary 30 includes target customer defining characteristics, target customer selection rationales, a summary of the new vehicles' role in the product portfolio, a competitive assessment, enduring reasons why a customer may purchase the new vehicle, and pricing considerations. See page 7, lines 1-33 of the specification.

Claim 31 recites the system of claim 28 wherein providing target vehicle image characteristics includes providing a brand bullseye 50. See page 7, lines 33-34, page 8, lines 1-34, and page 9, lines 1-9 of the specification.

Claim 33 recites the system of claim 28 wherein the cross-functional product team includes at least one member from each of the following corporate departments: vehicle program management, marketing, purchasing, finance, engineering, and design. See page 20, lines 10-26 of the specification.

## **VI. Issues**

The following issues are presented in this appeal, which correspond directly to the Examiner's final grounds for rejection in the Final Office Action of August 23, 2004, hereinafter referred to as the "Final Office Action", and in the Advisory Action of November 3, 2004, hereinafter referred to as the "Advisory Action":

(1) whether claims 10 and 23 should stand objected to and whether claims 1-4, 6-8, 10, 13-15, 17-21, 23, 26, and 27 are patentable under 35 U.S.C. 102(b) as being anticipated by Cooper et al., "Building market structures from customer preferences", and

(2) whether claims 28-31 and 33 are patentable under 35 U.S.C. 103(a) over Cooper and Eisner, "Essentials of Project and Systems Engineering Management".

## **VII. Grouping of Claims**

The rejected claims have been grouped together by the Patent Office Examiner in the rejection. The Appellants state, however, that each of the rejected claims stand on their own recitation and are separately patentable for the reasons set forth in more detail below.

Also, although claims 10 and 23 stand objected to and would be allowed if rewritten in independent form, as suggested in the Advisory Action and as agreed to by the Examiner in the phone conversation of November 10, 2004, since claims 10 and 23 have not been rewritten in independent form and since their allowance as written depends upon the allowance of independent claims 1 and 13 they are incorporated into Argument A below.

## **VIII. Argument**

### **A. THE OBJECTION OF CLAIMS 10 AND 23 AND THE REJECTION OF CLAIMS 1-4, 6-8, 10, 13-15, 17-21, 23, 26, AND 27 UNDER 35 U.S.C. § 102(b)**

Claims 10 and 23 stand objected to for being dependent upon claims 1 and 13 and claims 1-4, 6-8, 13-15, 17-21, 26 and 27 stand fully rejected under 35 U.S.C. § 102(b) as being anticipated by Cooper.

Cooper discloses a study that presents a model for the mapping of competitive market structures. Cooper provides a map of a current competitive market to provide an understanding of the current status of that market. Cooper examines, maps, and provides a broad understanding of the existing status of the U.S. car market. Cooper does not provide a method of developing a brand profile for a new product nor

does Cooper disclose many of the tasks performed to develop a brand profile, as provided in the limitations of claims 1-4, 6-8, 10, 13-15, 17-21, 23, 26, and 27.

Cooper discloses a model for combining switching probabilities used to identify competitive groups and attribute ratings to form a picture of how a market structure is built. The competitive groups refer to groups of products, across a market segment, which are in direct competition. For example, as stated in Cooper, a competitive group may consist of the Lexus LS400, the Cadillac STS, and the Infinity Q45. Cooper provides the steps to generate a market structure model. Cooper does not provide the steps to develop a brand profile or for that matter the steps to develop a product, but rather simply provides an overall understanding of an existing market structure. Although the market structure model provided within Cooper may be utilized in the development of a brand profile, nowhere in Cooper is there any mention of how this is accomplished nor is a suggestion thereof provided. Also, as is further expressed below, the market structure model of Cooper and steps to generate that model are clearly different than the recited limitations of claims 1 and 13 of the present application.

In the Final Office Action and in the Advisory Action it is stated that Cooper develops a brand profile and provides the steps to develop a brand profile. The Final Office Action relies on a category-attribute matrix in Table 2 and the material content on pages 3, 9, and 10 of Cooper to show that Cooper discloses the developing of a brand profile and steps involved therein. The Final Office Action refers to the category-attribute matrix as a brand-attribute matrix and relies on such for the teaching of the steps to develop a brand profile.

The category-attribute matrix of Cooper is a matrix of vehicle attribute values for various car categories. The car-categories include, for example, Subcompact/Domestic, Low-Price Compact, Mid-size Domestic, as well as other similarly labeled categories. These categories are clearly not vehicle brands. A proper definition of the term "brand" is provided above, is provided and suggested by the Applicants in the prosecution history, and is provided in various locations within the present application. Note also that it is well settled that a patentee may define a claim term either in the written description of the patent or in the prosecution history,

*Mycogen Plant Science v. Monsanto Co.*, 243 F.3d 1316, 1327, 58 USPQ2d 1030, 1039 (Fed. Cir. 2001).

Also, the fact that Cooper refers to Table 2 on page 7 as a “brandattribute matrix” does not necessarily make it such. Applicants submit that this use of the term “brand” is improper. As stated, the term “brand” refers to the “Make” of a product not to a car-category. Also, whether or not the use of the term “brand” by Cooper is proper, the intended definition of the term “brand” for the present application is clearly provided.

The category-attribute matrix of Cooper in providing a comparison between vehicle attributes across multiple car categories does not provide any of the steps involved in developing a brand profile or any of the steps involved in developing a brand profile for a new product nor does it suggest the same. Table 2 does not even include one particular brand. Table 2 simply provides a current status understanding of certain vehicle attributes across multiple car-categories. Table 2 does not place attributes in an attribute class according to brand personality importance, generate a preferred product brand position, or generate target product characteristics as a function of a preferred product brand position, nor does it provide any steps associated therewith.

The Advisory Action states that whether or not Cooper teaches a brand-attribute matrix the claims do not expressly recite a brand attribute-matrix. Applicants admit that a brand-attribute matrix is not recited in the claims. The Response of October 20, 2004, hereinafter “the Response”, provided some of the above-stated arguments, which were directed to the reasons why the category-attribute matrix of Cooper is not a brand-attribute matrix so that it can no longer be relied upon as such and so that it can no longer be relied upon for providing steps to develop a brand profile.

The Advisory Action states that Cooper teaches vehicle attributes related to vehicle brands, and relies on Cooper in recognizing that Small Specialty / Domestic (a particular car category) cars have attributes, such as long in front, short in the rear, and cost more to maintain than comparable imports. Again, this is not a comparison or relation between vehicle attributes and vehicle brands, but is rather a recognized

relationship between attributes of two different car categories, the two car categories being Small Specialty/Domestic and Small Specialty/Imports.

The Advisory Action states that all cars have a related brand and associated attributes and thus the attribute matrix of Cooper is a grouping of product attributes related to vehicle characteristics. Although this may be true, this recognition, does not suggest the generation of target product characteristics in response to product attributes for a product under consideration. The mere recognition that current products within a particular category, due to similar characteristics, have a certain group of attributes with similar or the same associated values, does not provide objectives for each of the attributes for the incorporation into a new product. Determining existing characteristics of vehicles in a particular car-category, although may be helpful in the generation of target product characteristics, does not suggest or provide the target product characteristics for a particular new product. Recognizing the current status of a broad range of products for various categories and the grouping of those products into similar categories based on similar characteristics is clearly not the same as the generation or the determination of target characteristics for a particular new product.

The Final Office Action and the Advisory Action state that Cooper on page 3 discloses the placing of attributes in classes based on consumers' decision-making process, and thus, brand personality importance. As stated in the Response, on page 3, in paragraphs 2-5, Cooper discloses that consumers evaluate brands on the basis of their underlying values. Cooper states that in other words consumers evaluate a car on the basis of attributes such as sportiness or comfort. The evaluation of a product by a consumer on the basis of various attributes is not the same as the grouping of particular attributes, the grouping of particular attributes to form an attribute class, or the grouping of particular attributes to form an attribute class corresponding to brand personality importance. For example, a consumer stating that a particular vehicle is sporty, has a stiff suspension, and has a large amount of leg room, is not the same as grouping a determined and preferred sportiness level, a suspension stiffness level, and a leg room amount to form an attribute class as desired for brand personality importance for a particular new product. In the first instance a consumer is simply

evaluating a vehicle. In the second instance an attribute class is being generated in accordance with brand personality importance. Whether a consumer prefers a particular vehicle based on the level of sportiness that the vehicle provides is distinctly different from the grouping of multiple attributes based on a desired brand personality to develop or produce a certain type of vehicle.

On page 3, Cooper also discloses that consumers have different ideal profiles of brand. Cooper states that each consumer has an ideal point for a particular attribute. Recognizing that a consumer has ideal points for vehicle attributes, such as preferring a vehicle with 130 horsepower does not teach or suggest the grouping of particular attributes, the grouping of particular attributes to form an attribute class, or the grouping of particular attributes to form an attribute class corresponding to brand personality importance. This recognition merely suggests that consumers have different desires and that those desires can be identified as ideal points.

On page 3, Cooper also discloses that consumers have different consideration sets of brands. Cooper states that when a consumer desires certain vehicle aspects, such as comfort and prestige, that the consumer might consider vehicles within a competitive group that provide those vehicle aspects. Recognizing that a consumer when desiring certain vehicle aspects or characteristics might consider vehicles within a particular competitive group is also not the same as the grouping of particular attributes, the grouping of particular attributes to form an attribute class, or the grouping of particular attributes to form an attribute class corresponding to brand personality importance. In the first instance one is identifying a competitive group of vehicles within, for example, one or two car categories, in the second instance one is grouping vehicle attributes as preferred or targeted for a particular brand of a new product. Thus, Applicants, respectfully, submit that nowhere on page 3 of Cooper or anywhere else in Cooper are the stated limitations of the grouping of particular attributes, the grouping of particular attributes to form an attribute class, or the grouping of particular attributes to form an attribute class corresponding to brand personality importance taught or suggested.

The Final Office Action and the Advisory Action also state that on pages 3, 9, and 10 that Cooper discloses generating preferred vehicle brand positions and

target vehicle characteristics where it states that consumers have different consideration sets of brands... a market can be divided into a certain number of submarkets in which homogeneous consumers consider a distinctive subset of brands with a particular rule of attribute evaluation and reference to a specific ideal point. Applicants submit that nowhere in Cooper are preferred vehicle brand positions determined nor are they determined in the relationship to the development of a new product. On page 3 Cooper portrays a competitive market as a series of heterogeneous competitive groups that have homogeneous consideration sets and preference structures. In determining the existing homogeneous sets Cooper states that consumers have different ideal profiles of brand. The existence of a brand profile in the view of a consumer is clearly different than determining a brand profile in accordance with brand personality importance for a new product. Also, in determining the heterogeneous competitive groups Cooper states that consumers have different consideration sets of brands. As such, Cooper states that a consumer considering a Lexus may consider an LS400, the Cadillac STS, or the Infinity Q45 and not the Hyundai Excel or Toyota Corolla. Selecting a vehicle within segments is also clearly not the same as the grouping of multiple attributes based on a desired brand personality to develop or produce a certain type of vehicle or product.

The tasks performed to identify that consumers have different ideal profiles of brand and different consideration sets of brands to portray and map a competitive market are unlike the tasks performed to development and generate a preferred brand profile for the production of a vehicle. In mapping a competitive market one is providing an understanding of the status of a current market. In developing and generating a preferred brand profile one is determining, for example, target attributes for which a particular brand of vehicle is to encompass in the future.

On page 9 of Cooper, Cooper refers to submarkets and provides examples in which cars of particular categories are losing or gaining momentum and also parameter estimates and standard errors for the submarkets in the form of a final model. Cooper, for example, states that midsize domestic cars are becoming more niche-players and thus losing momentum in the universal market, but gaining momentum in the domestic market. Again, this understanding of the status of certain

submarkets is directed towards the current status of a market structure. Nowhere on page 9 is the determination or generation of a preferred brand profile mentioned or suggested.

On page 10 of Cooper, Cooper discloses, as stated in the previous Response, the universal market and provides a plot illustrating product categories in relation to price and size. Again this is irrelevant with regards to the generation of a preferred product brand position. The relation between product categories which each contain products from multiple brands, does not provide one with any knowledge regarding the brand position or profile under development of a particular product within a particular product segment.

The Final Office Action states that while the focus of Cooper may be on market structures it still must determine brand profiles in order to determine market structures. Applicants submit that whether this is true or not is irrelevant. Having knowledge of existing brand profiles is not the same as determining a preferred brand profile for a particular brand. Determining the current status of an existing brand is different than grouping multiple attributes based on a desired brand personality to develop or produce a certain type of vehicle.

The Final Office Action also states that claims 1 and 13 are drafted broadly, specifically that they do not expressly recite how a preferred vehicle brand position is generated, rather, that it is merely a function of vehicle attributes. Applicants submit that each of claims 1 and 13 recite not only that a preferred vehicle brand position is generated as a function of product attributes, but also recite that a preferred vehicle brand position is generated through the identification of a competitive set of products and that each of the product attributes are associated with a preferred competitive level with respect to the competitive set. A preferred vehicle brand position is generated by a determination of which products are competitive with the product being developed and by a determination of how the product being developed compares with the products in the competitive set. In determining how the product being developed is to compare, preferred competitive levels are assigned to the provided product attributes. Thus, Applicants submit that claims 1 and 13 do specifically state how a preferred vehicle brand position is generated.



The Final Office Action also states that claims 1 and 13 do not expressly recite how target vehicle characteristics are generated, rather, that they are merely a function of vehicle attributes and brand position. Applicants submit that each of claims 1 and 13 recite not only that target product characteristics are generated as a function of product attributes and a preferred product brand position, but also that they are generated as a function of classified product attributes. The product attributes are placed in an attribute class corresponding to the brand personality importance. Also, since the preferred product brand position is generated through the identification of a competitive set and the generation of competitive levels, the target vehicle characteristics are also generated therefrom. In addition, claims 1 and 13 recite that the target product characteristics represent customer-driven objectives for each of the product attributes, which are to be incorporated into the new product. The target product characteristics are generated by determining the classified product attributes for the product under development and by determining the competitive level for each of the classified attributes through customer driven objective representation. Thus, Applicants submit that claims 1 and 13 do specifically state how target product characteristics are generated.

Additionally, the Final Office Action states that it appears that the Applicants intend more specific meanings for the terms "vehicle attributes" and "attribute classes". Applicants submit that sample definitions of the stated terms were provided in the Response of May 17, 2004 to provide a better understanding of the claims. Whether these terms carry the specific meaning provided or a broader meaning is irrelevant and a more specific definition recited in the claims or elsewhere is unnecessary, since Cooper fails to teach or suggest the developing of a brand profile for a new product, specifically, the grouping of particular attributes, the grouping of attributes to form an attribute class, the grouping of attributes to form an attribute class corresponding to brand personality importance, the generating of a preferred product brand position, the identifying of a competitive set of products, the associating of product attributes with a preferred competitive level with respect to a competitive set, and the generating of target product characteristics.

Applicants again note that Cooper is not directed towards or concerned with positioning of a brand or developing a brand profile, but is rather concerned with the mapping and portraying of the current status of a market structure. Thus, not only are the primary problems solved by Cooper and the present invention different, the methods as to how the problems are solved and elements involved therein are also different.

In order for a reference to anticipate a claim the reference must teach or suggest each and every element of that claim, see MPEP 2131 and *Verdegrad Bros. V. Union Oil Co. of California*, 814 F.2d 628. Since a majority of the limitations recited in claims 1 and 13 are not taught or suggested by Cooper, Applicants, therefore, respectfully submit that the combinations in claims 1 and 13 are not found in the prior art.

Claim 2 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites providing summary attributes and clarifying a definition for each of the summary attributes. The clarifying definition provides a relationship between each of the product attributes 62 and the type of product under development. Neither of the references teach nor suggest this combination.

Claim 3 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites providing a detailed definition for each of the product attributes 62. Each of the detailed definitions provides a context for each attribute 62 as it relates to the product under development. Neither of the references teach nor suggest this combination.

Claim 4 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites placing each attribute 62 in one of three classes wherein the first class represents attributes which differentiate the product from competing products. The second class represents important attributes, but that do not differentiate the new product from the competing products, and the third class represents otherwise desirable product attributes. Neither of the references teach nor suggest this combination.

Claim 6 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites ranking of each product attribute 62. The rank being related to each of the classes such that each of the attributes in the first class has a higher rank than each of the attributes in the second class. Each of the attributes in the second class has a higher rank than each of the attributes in the third class. Neither of the references teach nor suggest this combination.

Claim 7 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites generating of a primary brand position as a function of the product attributes 62. Neither of the references teach nor suggest this combination.

Claim 8 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites generating a present product brand position as a function of the product attributes 62. Neither of the references teach nor suggest this combination.

Claim 10 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1 and further recites prioritizing each product attribute 62 in one of four levels, the first level represents a desire for the product attribute to be a leader (L) with respect to the competitive set, the second level represents a desire for the product attribute to be among the leaders (A) with respect to the competitive set, the third level represents a desire for the product attribute to be competitive (C) with respect to the competitive set, and the fourth level represents a desire for the product attribute to be minimally competitive (M) with respect to the competitive set. Neither of the references teach nor suggest this combination.

Claim 14 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites providing summary attributes and clarifying a definition for each of the summary attributes. The clarifying definition provides further detail relating each of the vehicle attributes 62 to a vehicle characteristic. Neither of the references teach nor suggest this combination.

Claim 15 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites providing a

detailed definition for each of the vehicle attributes 62. Each of the detailed definitions provides a context for each attribute 62 as it relates to the vehicle under development. Neither of the references teach nor suggest this combination.

Claim 17 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites placing each attribute 62 in one of three classes. The first class represents attributes that differentiate the vehicle from competing vehicles. The second class represents important attributes, but that do not differentiate the vehicle from competing vehicles. The third class represents otherwise desirable vehicle attributes. Neither of the references teach nor suggest this combination.

Claim 18 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites ranking each of the vehicle attributes 62. Neither of the references teach nor suggest this combination.

Claim 19 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 17 and further recites ranking each of the vehicle attributes 62, the rank being related to each of the classes such that each of the attributes in the first class have a higher rank than each of the attributes in the second class and each of the attributes in the second class have a higher rank than each of the attributes in the third class. Neither of the references teach nor suggest this combination.

Claim 20 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites generating a primary brand position as a function of the vehicle attributes 62. Neither of the references teach nor suggest this combination.

Claim 21 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites generating a present product brand position as a function of the vehicle attributes 62. Neither of the references teach nor suggest this combination.

Claim 23 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 13 and further recites prioritizing

each vehicle attribute 62 in one of four levels, the first level representing a desire for the vehicle attribute to be a leader (L) with respect to the competitive set, the second level representing a desire for the vehicle attribute to be among the leaders (A) with respect to the competitive set, the third level representing a desire for the vehicle attribute to be competitive (C) with respect to the competitive set, and the fourth level representing a desire for the vehicle attribute to be minimally competitive (M) with respect to the competitive set. Neither of the references teach nor suggest this combination.

Claim 26 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 19 and further recites ranking design attributes differently than usage experience attributes and driving experience attributes. Neither of the references teach nor suggest this combination.

Claim 27 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 26 and further recites classifying each design attribute on a scale having more gradients than the classification scale for classifying usage experience attributes or driving experience attributes. Neither of the references teach nor suggest this combination.

#### **B. THE REJECTION OF CLAIMS 28-31 and 33 UNDER 35 U.S.C. § 103(a)**

Claims 28-31, and 33 stand fully rejected under 35 U.S.C. 103(a) over Cooper and Eisner.

Neither Cooper nor Eisner alone or in combination teach or suggest: (A) the placement of each of the product attributes in an attribute class corresponding to brand personality importance; (B) the generation of a preferred vehicle brand position through use of a cross-functional product team and as a function of vehicle attributes, target customer characteristics, and target vehicle brand image characteristics; and (C) the generation of target vehicle objectives by the cross-functional product team as a function of the vehicle attributes and the preferred vehicle brand position.

Eisner discloses interrelationships between project management and systems engineering. Eisner teaches an idea of “integrated product teams” with respect to team behavior and integrative management. The integrated product teams may include areas of marketing, sales, and research.

The Office Actions rely on Cooper for the teaching or suggesting of the limitations contained within elements (A)-(C) above, except for the use of a cross-functional product team, for which the Office Actions rely on Eisner. Applicants take note that a product team is the only limitation contained within elements (A)-(C) above that is mentioned within Eisner. The Office Actions state that Cooper does not disclose the use of a cross-functional product team. In regards thereto, Applicants agree. Applicants submit that Cooper also fails to teach or suggest any of the limitations within elements (A)-(C) above.

In regards to element (A) above, Applicants submit that Cooper does not teach or suggest placing each of the product attributes in an attribute class corresponding to brand personality importance. See Argument section A above.

In regards to element (B) above, Cooper also does not teach or suggest the generation of a preferred vehicle brand position as a function of vehicle attributes, target customer characteristics, and target vehicle brand image characteristics, let alone through use of a cross-functional product team. Nowhere in Cooper is a vehicle brand position mentioned or determined. Although Cooper provides a matrix of car-categories versus attributes and recognizes that customers have different ideal points and that customers may consider different competitive groups of vehicles between one or more car categories, Cooper does not generate a preferred vehicle brand position nor does Cooper generate a preferred vehicle brand position for a new product. Cooper provides a model that maps the current status of a vehicle market containing multiple car categories. Nowhere in the formation of the model is a preferred vehicle brand position for a new product determined, forecasted, evaluated, suggested, or mentioned.

In addition and in regards to element (C) above, Cooper does not teach or suggest the generation of target vehicle objectives as a function of the vehicle attributes and the preferred vehicle brand position, let alone the generation thereof by a cross-functional product team. Since Cooper does not teach or suggest the determination of a preferred vehicle brand position, Cooper also does not teach or suggest the generation of target vehicle objectives as a function of the preferred vehicle brand position.

Also, there is no motivation or suggestion in either Cooper or Eisner to combine and modify the stated references to arrive at the claimed invention.

Referring to MPEP 2143.01, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). There is no suggestion in either Cooper or Eisner for any combination thereof nor does the combination of each reference allow one to arrive at the present invention as is claimed in claim 28, since each and every element of claim 28 is not taught or suggested by Cooper, Eisner, or a combination thereof. Cooper maps a current state of a market structure and Eisner is directed towards interrelationships between project management and systems engineering. Neither reference develops a brand personality or a brand profile.

Furthermore, Cooper and Eisner are unrelated and there is no suggestion in either Cooper or Eisner for any combination thereof nor is there any suggestion for the combination and modifications thereof that are necessary to arrive at the claimed invention. Nowhere in Eisner is the status of a current market structure or brand positioning discussed let alone the use of an integrated product team to generate a vehicle brand position. As well, integrated teams, system engineering, and brand development are not discussed in Cooper. The Office Actions state that Eisner discloses the use of integrating product teams including areas of marketing, sales, and research and development. The product teams allow for various departments from differing business functions to partake in the vehicle product development. Although Eisner may disclose the use of product teams in the development of a product, there is no logical suggestion or connection provided between the use of product teams in the development of a product and the use of a cross-functional product team to map a market structure or to determine attributes of a product for brand development, which may or may not be determined through use of such a team. As such, clearly no logical connection has been provided or exists in either reference between the mapping of a market structure, the use of product teams, and the development of a brand profile for a new product. Merely stating that a cross-functional product team may be used to generate a vehicle brand position, does not provide such connection and one cannot do so without the use of improper hindsight reconstruction. Thus, although an integrated

product team is mentioned in Eisner there is no direct connection with that of Cooper nor is there a direct connection with that of the claimed invention.

Neither Cooper nor Eisner alone or in combination teach or suggest the use of cross-functional product teams in brand positioning. Although it may be known to use product teams having areas of marketing, sales, and research and development in combining project management with systems engineering, it is not known to use a cross-functional product team in the determination of a vehicle brand position. For the sake of argument, the combination of Cooper and Eisner may lead one to use an integrated product team to provide the data used to model or map a current market structure, but the combination thereof does not allow one to arrive at the method of claim 28 of the present application. Neither Cooper nor Eisner mention developing a brand profile, determining brand positioning, or performing tasks thereof using a cross-functional product team. Therefore, Applicants respectfully submit that the combinations in claim 28 are not found in the prior art.

Claim 29 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 28 and further recites providing a brand positioning summary. Neither of the references teach nor suggest this combination.

Claim 30 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 29 and further recites the brand positioning summary to include target customer defining characteristics, target customer selection rationales, a summary of the new vehicles' role in the product portfolio, a competitive assessment, enduring reasons why a customer may purchase the new vehicle, and pricing considerations. Neither of the references teach nor suggest this combination.

Claim 31 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 28 and further recites providing a brand bullseye 50. Neither of the references teach nor suggest this combination.

Claim 33 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 28 and further recites the cross-functional product team including at least one member from each of the following



corporate departments: vehicle program management, marketing, purchasing, finance, engineering, and design. Neither of the references teach nor suggest this combination.

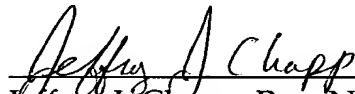
**IX. Appendix**

A copy of the claims involved in this appeal, namely claims 1-4, 6-8, 10, 13-15, 17-21, 23, 26-31, and 33, is attached hereto as Appendix A.

**X. Conclusion**

For the reasons advanced above, Appellants respectfully contend that each claim is patentable. Therefore reversal of the rejection is requested.

Respectfully submitted,



Jeffrey J. Chapp, Reg. No. 50,579

Attorney for Assignee

Artz & Artz, P.C.

28333 Telegraph Road, Suite 250

Southfield, MI 48034

(248) 223-9500

Dated: November 19, 2004

## APPENDIX A

### What is claimed is:

1. A method of developing a brand profile for a new product comprising the steps of:

providing a predetermined plurality of product attributes each representing an identifiable feature of a generic product under consideration;

grouping said product attributes in response to customer-oriented market research;

placing each of said attributes in an attribute class corresponding to brand personality importance;

thereafter, generating a preferred product brand position as a function of said product attributes via a processor, including identifying a competitive set of products, and associating each of said product attributes with a preferred competitive level with respect to said competitive set; and

generating target product characteristics as a function of said classified product attributes and said preferred product brand position via said processor, said target product characteristics representing customer-driven objectives for each of said plurality of product attributes to be incorporated into said new product.

2. A method as recited in claim 1 wherein the step of providing a predetermined plurality of product attributes comprises the steps of providing a plurality of summary attributes and a clarifying definition for each of said summary attributes, said clarifying definition providing a relationship between each of said product attributes and the type of product under development.

3. A method as recited in claim 1 wherein the step of providing a predetermined plurality of product attributes includes the step of providing a detailed definition for each of said product attributes, each of said detailed definitions providing a context for each attribute as it relates to the product under development.

4. A method as recited in claim 1 wherein the step of placing each of said

attributes in an attribute class includes the step of placing each attribute in one of three classes wherein said first class represents attributes which differentiate the product from competing products, said second class represents important attributes, but which do not differentiate the new product from competing products, and said third class represents otherwise desirable product attributes.

6. A method as recited in claim 4 further comprising the step of ranking each of said product attributes, said rank being related to each of said classes such that each of said attributes in said first class have a higher rank than each of said attributes in said second class and each of said attributes in said second class have a higher rank than each of said attributes in said third class.

7. A method as recited in claim 1 further comprising the step of generating a primary brand position as a function of said product attributes.

8. A method as recited in claim 1 further comprising the step of generating a present product brand position as a function of said product attributes.

10. A method as recited in claim 1 wherein the step of associating each of said product attributes with a preferred competitive level with respect to said competitive set includes the step of prioritizing each product attribute in one of four levels, said first level representing a desire for the product attribute to be a leader (L) with respect to the competitive set, said second level representing a desire for the product attribute to be among the leaders (A) with respect to the competitive set, said third level representing a desire for the product attribute to be competitive (C) with respect to the competitive set, and said fourth level representing a desire for the product attribute to be minimally competitive (M) with respect to the competitive set.

13. A method of developing a brand profile for a new automotive vehicle comprising the steps of:

providing a plurality of vehicle attributes, said plurality including at least attributes from each of the following groups of vehicle characteristics: usage experience, driving experience, and design;

grouping said product attributes in response to customer-oriented market research;

placing each of said attributes in an attribute class corresponding to brand personality importance;

thereafter, generating a preferred vehicle brand position as a function of said vehicle attributes via a processor including identifying a competitive set of products, and associating each of said vehicle attributes with a preferred competitive level with respect to said competitive set; and

generating target vehicle characteristics as a function of said vehicle attributes and said preferred vehicle brand position via said processor, said target vehicle characteristics representing customer-driven objectives for each of said plurality of vehicle attributes to be incorporated into said new automotive vehicle.

14. A method as recited in claim 13 wherein the step of providing a plurality of vehicle attributes comprises the steps of providing a plurality of summary attributes and a clarifying definition for each of said summary attributes said clarifying definition providing further detail relating each of said vehicle attributes to a vehicle characteristic.

15. A method as recited in claim 13 wherein the step of providing a plurality of vehicle attributes includes the step of providing a detailed definition for each of said vehicle attributes each of said detailed definitions providing a context for each attribute as it relates to the vehicle under development.

17. A method as recited in claim 13 wherein the step of placing each of said vehicle attributes in an attribute class includes the step of placing each attribute in one of three classes wherein said first class represents attributes which will differentiate the vehicle from competing vehicles, said second class represents important attributes, but which do not differentiate the vehicle from competing vehicles, and said third class

represents otherwise desirable vehicle attributes.

18. A method as recited in claim 13 further comprising the step of ranking each of said vehicle attributes.

19. A method as recited in claim 17 further comprising the step of ranking each of said vehicle attributes, said rank being related to each of said classes such that each of said attributes in said first class have a higher rank than each of said attributes in said second class and each of said attributes in said second class have a higher rank than each of said attributes in said third class.

20. A method as recited in claim 13 further comprising the step of generating a primary brand position as a function of said vehicle attributes.

21. A method as recited in claim 13 further comprising the step of generating a present product brand position as a function of said vehicle attributes.

23. A method as recited in claim 13 wherein the step of associating each of said vehicle attributes with a preferred competitive level with respect to said competitive set includes the step of prioritizing each vehicle attribute in one of four levels, said first level representing a desire for the vehicle attribute to be a leader (L) with respect to the competitive set, said second level representing a desire for the vehicle attribute to be among the leaders (A) with respect to the competitive set, said third level representing a desire for the vehicle attribute to be competitive (C) with respect to the competitive set, and said fourth level representing a desire for the vehicle attribute to be minimally competitive (M) with respect to the competitive set.

26. A method as recited in claim 19 wherein the step of ranking each of said attributes includes the step of ranking design attributes differently than usage experience attributes and driving experience attributes.

27. A method as recited in claim 26 wherein the step of classifying each of said attributes includes the step of classifying each design attribute on a scale having more

gradients than the classification scale for classifying usage experience attributes or driving experience attributes.

28. A method of developing a brand profile for a new automotive vehicle comprising the steps of:

providing a plurality of vehicle attributes, said plurality including at least attributes from each of the following groups of vehicle characteristics: usage experience, driving experience, and design;

grouping said product attributes in response to customer-oriented market research;

placing each of said attributes in an attribute class corresponding to brand personality importance;

providing a cross-functional product team;

providing target customer characteristics;

providing target vehicle brand image characteristics;

thereafter, generating a preferred vehicle brand position by said cross-functional product team as a function of said vehicle attributes, said target customer characteristics, and said target vehicle image characteristics via a computer; and

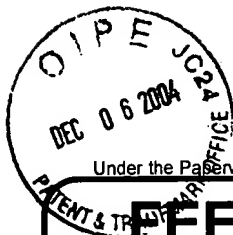
generating target vehicle objectives by said cross-functional product team as a function of said vehicle attributes and said preferred vehicle brand position via said computer, said target vehicle objectives representing customer-driven and image-driven characteristics for each of said plurality of vehicle attributes to be incorporated into said new automotive vehicle.

29. A method as recited in claim 28 wherein the step of providing target customer characteristics comprises the step of providing a brand positioning summary.

30. A method as recited in claim 29 wherein said brand positioning summary includes target customer defining characteristics, target customer selection rationales, a summary of the new vehicles' role in the product portfolio, a competitive assessment, enduring reasons why a customer may purchase the new vehicle, and pricing considerations.

31. A method as recited in claim 28 wherein the step of providing target vehicle image characteristics comprises the step of providing a brand bullseye.

33. A method as recited in claim 28 wherein said cross-functional product team includes at least one member from each of the following corporate departments: vehicle program management, marketing, purchasing, finance, engineering, and design.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 340.00

## Complete if Known

Application Number	09/395,455
Filing Date	09/14/1999
First Named Inventor	Andrew Sarkisian et al.
Examiner Name	Colon, Catherine M.
Art Unit	3623
Attorney Docket No.	199-1135 (FGT 1113 PA)

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

06-1510

Ford Motor Company

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	88	2201	44	Independent claims in excess of 3
1203	300	2203	150	Multiple dependent claim, if not paid
1204	88	2204	44	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	
1402	340	2402	170	Filing a brief in support of an appeal	340.00
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 340.00

## SUBMITTED BY

Name (Print/Type) Jeffrey J. Chapp

Registration No.  
(Attorney/Agent)

50579

(Complete if applicable)

Telephone 2482239500

Signature

*Jeffrey J. Chapp*

Date

December 2, 2004

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.  
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.